

ABSTRACT:

A method and arrangement are disclosed for embedding a watermark in an MPEG compressed video stream. The watermark (a spatial noise pattern) is embedded by selectively discarding the smallest quantized DCT coefficients. The discarded coefficients are subsequently merged in the runs of the remaining coefficients. The decision whether a
5 coefficient is discarded or not is made on the basis of a pre-calculated watermark buffer and the number of already discarded coefficients per 8x8 DCT block. The advantages of this method are (i) a very simple bit rate control system and (ii) no need for drift compensation. The algorithm can be implemented in a very efficient manner with respect to memory requirements and computational complexity.

See Fig. 1.

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